OPPMANN, et al.

COMPLEXES

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MAMMALIAN CYTOKINE RELATED REAGENTS AND METHODS Q

This filing is a conversion to U.S. Utility Patent Application of USSN 60/124,319, filed March 11, 1999, which is incorporated herein by reference.

## FIELD OF THE INVENTION

The present invention pertains to compositions related to proteins which function in controlling biology and physiology of mammalian cells, e.g., cells of a mammalian immune system. In particular, it provides purified genes, proteins, antibodies, related reagents, and methods useful, e.g., to regulate activation, development, differentiation, and function of various cell types, including hematopoietic cells.

## BACKGROUND OF THE INVENTION

Recombinant DNA technology refers generally to the technique of integrating genetic information from a donor source into vectors for subsequent processing, such as 20 through introduction into a host, whereby the transferred genetic information is copied and/or expressed in the new environment. Commonly, the genetic information exists in the form of complementary DNA (cDNA) derived from messenger RNA (mRNA) coding for a desired protein product. 25 The carrier is frequently a plasmid having the capacity to incorporate cDNA for later replication in a host and, in some cases, actually to control expression of the cDNA and thereby direct synthesis of the encoded product in the 3.0 host.

For some time, it has been known that the mammalian immune response is based on a series of complex cellular interactions, called the "immune network". See, e.g.,

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